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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/787,096	03/13/2001	Gijsbert Joseph Van Den Enden	PHN 17,551	1082

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PHILIPS INTELLECTUAL PROPERTY & STANDARDS
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EXAMINER	
AGUSTIN, PETER VINCENT	
ART UNIT	**PAPER NUMBER**
2652	7

DATE MAILED: 04/26/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/787,096	Applicant(s) VAN DEN ENDEN, GIJSBERT JOSEPH	
	Examiner Peter Vincent Agustin	Art Unit 2652	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-22* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-8 and 11-22* is/are rejected.

7)☒ Claim(s) *9-12,17* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *13 March 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1. Claims 9-12 objected to.

In regard to claim 9, step (b) recites a step of "optionally" entering tracks in an alarm list; and step (c) recites storing the alarm list in memory "if applicable". The quoted phrases suggest that these limitations are not necessary in the claim. Furthermore, claim 11 also recites the phrase "optionally". Applicant is required to rephrase the claims in such a way as to emphasize that the features are necessary to the claims.

2. Claim 17 objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a previous claim. Applicant is required to cancel the claim, or amend the claim to place the claim in proper dependent form, or rewrite the claim in independent form. Claim 17 drawn to a recording device is improperly dependent on claim 16, drawn to a method. (see MPEP 608.01(n) (II & III)). Further, claim 17 recites a control unit without specifying any functions, rather vague reference to a base claim's method. As such, the control unit/recording device does not necessarily include all the claimed features of base claim 16. Hence, it is in improper dependent form, and applicant is required to cancel, amend, or rewrite the claim into proper form.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 8, 11 & 12 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant

regards as the invention. Regarding claims 8 &11, the phrase "particularly a DVR disc" renders the claim indefinite because it is unclear whether the phrase is part of the claimed invention. See MPEP § 2173.05(d). Claim 12 is rejected because it is dependent upon claim 11.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

6. Claims 1, 2, 13 & 14 rejected under 35 U.S.C. 102(b) as being anticipated by Takasago et al. (hereafter Takasago) (US 4,730,290).

In regard to claim 1, Takasago discloses a method of examining a record carrier (figure 1, element 1) for the presence of a defect, comprising: following a track to be examined and monitoring the resulting tracking signal (column 5, lines 5-20); and rating the examined recording track on the basis of characteristics of the resulting tracking signal (column 5, line 47 thru column 6, line 14).

In regard to claim 2, Takasago discloses that the examined recording track is rated as being defective if the absolute value of the tracking signal has a value which exceeds a predetermined signal threshold for a predetermined period of time or longer (column 5, line 47 thru column 6, line 14).

In regard to claim 13, Takasago discloses a method of recording information on a record carrier (figure 1, element 1), comprising: monitoring a recording track (column 5, lines 5-20) and

based on the resulting tracking signal, determining whether the recording process is to be continued or discontinued (column 7, lines 6-19).

In regard to claim 14, Takasago discloses that the recording process is discontinued (column 7, lines 6-19) if the absolute value of the tracking signal appears to have a value which exceeds a predetermined signal threshold for a predetermined period of time or longer (column 5, line 47 thru column 6, line 14).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 3, 4, 15, 16, 18, 19, 21 & 22 rejected under 35 U.S.C. 103(a) as being unpatentable over Takasago as applied to claims 2 & 14 above.

For a description of Takasago, see the rejection above. Furthermore, in regard to claims 3, 15, 18 & 21, Takasago discloses that the tracking signal has a nominal signal value of zero which corresponds to the center of a track (column 5, line 49-51). Takasago also shows in figure 3a that the tracking signal has a maximum value and a level of a preselected fraction of the maximum value (V_{REF}) is chosen as the predetermined signal threshold. However, Takasago is silent to whether the maximum value corresponds to a maximum lateral deviation with respect to the center of a track. Takasago also does not disclose that a level of a preselected fraction of said maximum value chosen as the predetermined signal threshold is equal to approximately 0.5 or approximately 2/3. Takasago shows an unspecified maximum value and an unspecified fraction

of said maximum value having order of magnitude as shown in figure 3a for a typical tracking error signal.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to choose a maximum value corresponding to a maximum lateral deviation with respect to the center of a track because applicant has not disclosed that choosing such maximum value provides an advantage, is used for a particular purpose, or solves a stated problem and the method of examining would have been expected to perform equally well within the typical tracking error signal maximum value taught by Takasago, including the claimed maximum value corresponding to a maximum lateral deviation with respect to the center of a track because both maximum values perform the same function of providing a reference level that decides whether an examined track is defective or not.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to use a preselected fraction of approximately 0.5 or approximately 2/3 because applicant has not disclosed that using a preselected fraction of approximately 0.5 or approximately 2/3 provides an advantage, is used for a particular purpose, or solves a stated problem and the method of examining would have been expected to perform equally well within the typical tracking error signal fraction of said maximum value (V_{REF}) taught by Takasago including the claimed preselected fraction of approximately 0.5 or approximately 2/3 because all these fractions perform the same function of providing a threshold level that decides whether an examined track is defective or not.

In regard to claim 4, 16, 19 & 22, Takasago does not disclose that said predetermined period of time lies in a range from approximately 50 μs to approximately 75 μs. In regard to

claims 19 & 22, Takasago does not disclose that said predetermined period of time is approximately 60 μs. Takasago shows an unspecified period of time having order of magnitude as shown in figure 3 for a typical tracking error signal.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to choose a period of time lying in a range from approximately 50 μs to 75 μs or 60 μs because applicant has not disclose that choosing a period of time lying in this range provides an advantage, is used for a particular purpose, or solves a stated problem and the method of examining would have been expected to perform equally well within the typical tracking error signal time period taught by Takasago including the claimed time period lying in a range from approximately 50 μs to approximately 75 μs or approximately 60 μs because all these values/ranges of time period perform the same function of providing a reference time duration that decides whether an examined track is defective or not.

9. Claims 5 & 6 rejected under 35 U.S.C. 103(a) as being unpatentable over Takasago as applied to claim 1 above, and further in view of Tsuchiya et al. (hereafter Tsuchiya) (JP 01253638 A).

For a description of Takasago, see the rejection above. However, in regard to claim 5, Takasago does not disclose the steps of a) examining the integrity of predetermined test tracks of the record carrier, b) examining the integrity of tracks adjacent the relevant test track each time that upon the examination a test track appears to be defective, in order to determine in this way the number of tracks affected by the same spot defect, c) entering the relevant tracks in a defect list each time that the number thus determined in the step (b) is greater than a predetermined threshold value, and d) storing the defect list in a memory.

Tsuchiya discloses the steps of a) examining the integrity of predetermined test tracks of the record carrier (purpose, line 2), b) examining the integrity of tracks adjacent the relevant test track each time that upon the examination a test track appears to be defective (constitution, lines 10-11), in order to determine in this way the number of tracks affected by the same spot defect, c) entering the relevant tracks in a defect list (constitution, lines 4-7) each time that the number thus determined in the step (b) is greater than a predetermined threshold value, and d) storing the defect list in a memory (28). Furthermore, in regard to claim 6, Tsuchiya discloses that a predetermined number of tracks between successive test tracks is skipped (purpose, lines 1-3). It would have been obvious to one of ordinary skill in the art at the time of invention by the applicant to have added the steps of Tsuchiya to the method of Takasago, the motivation being to improve reliability in checking serious defects (see purpose, line 1).

10. Claim 7 rejected under 35 U.S.C. 103(a) as being unpatentable over Takasago & Tsuchiya as applied to claim 5 above, and further in view of Hosoya (US 4,821,521).

For a description of Takasago & Tsuchiya, see the rejections above. However, Takasago & Tsuchiya do not disclose that the defect list is recorded on the examined record carrier.

Hosoya discloses storing defective sector information in an optical disc (column 6, lines 22-25). It would have been obvious to one of ordinary skill in the art at the time of invention by the applicant to have stored the defect list of Takasago & Tsuchiya to the record carrier of Hosoya, the motivation being to provide convenient non-volatile retrieval of which tracks are usable for recording.

11. Claim 8 rejected under 35 U.S.C. 103(a) as being unpatentable over Takasago & Tsuchiya as applied to claim 6 above, and further in view of Hosoya.

For a description of Takasago & Tsuchiya, see the rejections above. Furthermore, Tsuchiya discloses the step of first providing, in an examination phase, a defect list of tracks affected by a comparatively large spot defect by means of a method as claimed in Claim 6 (see claim 6 rejection above). However, Takasago & Tsuchiya do not disclose the steps of subsequently recording information on the disc in a recording phase while reference is made to said defect list, the recording tracks included in said defect list being skipped in the recording process.

Hosoya discloses recording information on the disc in a recording phase while reference is made to a defect list, the recording tracks included in the defect list being skipped in the recording process (column 2, lines 64-68; see also figure 7). It would have been obvious to one of ordinary skill in the art at the time of invention by the applicant to have added the step of skipping defective tracks during recording as suggested by Hosoya to the method of Takasago & Tsuchiya, the motivation being to eliminate wasteful recording on unrecordable tracks.

12. Claim 20 rejected under 35 U.S.C. 103(a) as being unpatentable over Takasago & Tsuchiya as applied to claim 5 above.

For a description of Takasago & Tsuchiya, see the rejections above. However, Takasago & Tsuchiya do not disclose that approximately 50 tracks between successive test tracks are skipped. Tsuchiya discloses skipping an unspecified number of tracks.

At the time the invention was made, it would have been obvious to a person of ordinary skill in the art to skip approximately 50 tracks because applicant has not disclosed that skipping approximately 50 tracks provides an advantage, is used for a particular purpose, or solves a stated problem and the method of examining would have been expected to perform equally well

within the number of tracks to be skipped taught by Tsuchiya, including the claimed 50 tracks because both perform the same function of eliminating the need to examine the disc one track at a time.

Allowable Subject Matter

13. Claims 9-12 objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims, and if rewritten to overcome the objections and the rejections under 35 U.S.C. 112, second paragraph noted above.

14. The following is a statement of reasons for the indication of allowable subject matter:

In regard to claim 9, no prior art of record alone or in combination discloses or suggests a method of examining for defects by rating a tracking signal further comprising the steps of: a) examining the integrity of predetermined test tracks of the record carrier; b) entering the relevant tracks in a primary defect list each time that upon the examination of a test track it appears to be defective, and **entering tracks situated in a suspect area at opposite sides of the relevant test track in an alarm list**; and c) **storing** the primary defect list and **the alarm list in a memory**.

Claims 10-12 are allowable because they are dependent upon allowable base claim 9.

Conclusion

15. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

16. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter Vincent Agustin whose telephone number is (703) 305-8980. The examiner can normally be reached on Monday thru Friday 9:00AM - 5:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Nguyen can be reached on (703) 305-9687. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

PVA
04/01/2004

W.R. YOUNG
PRIMARY EXAMINER